

**REMARKS**

**Status of Claims:**

New claims 18 and 19 have been added. Thus, claims 1-19 are present for examination.

**Prior Art Rejection:**

Claims 1-4 stand rejected under 35 U.S.C. § 103 as obvious over Vulis in view of Furukawa and Otto. Claims 5-17 stand rejected under 35 U.S.C. § 103 as obvious over Vulis in view of Dixon and Herrman and Nassi.

The examiner's rejections are respectfully traversed.

Applicant has amended base apparatus claim to recite:

A superconducting cable comprising a superconducting layer, wherein the superconducting layer has a portion whose critical current value is differentiated from the critical current value of ~~the other~~ another , normal portion;

wherein:

the potion of the superconducting layer is a current limiting portion having a critical current value smaller than that of the normal portion; and

the current limiting portion and the normal portion are constituted by a superconducting tape, and the current limiting portion having a smaller number of clad wires than that used for the normal portion so that the amount of superconductor of the current limiting portion is reduced as compared to the normal portion.

The underlined portions of the above amended claim 1 clearly differentiate applicants invention from the applied prior art. While Vulis mentions an insert in the cable or a cavity and while Furukawa shows a shielding device or notch in the cable and while Otto shows various current limiting composites, none of the references disclose the limitations as now recited in the above underlined portions of amended claim 1. As such, It is thus submitted

that the PTO has not made out a *prima facie* case of obviousness under the provisions of 35 U.S.C. § 103, and thus applicants claims are patentable over the prior art.

Newly submitted independent claims 18 and 19 are likewise deemed patentable since the prior art does not disclose the limitations recited therein.

**Conclusions:**

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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